



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,323	09/05/2003	Hideo Asakawa	0055/035001	5857

22893 7590 09/23/2004

SMITH PATENT OFFICE
1901 PENNSYLVANIA AVENUE N W
SUITE 200
WASHINGTON, DC 20006

EXAMINER

DICKEY, THOMAS L

ART UNIT	PAPER NUMBER
----------	--------------

2826

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/655,323

Applicant(s)

ASAKAWA, HIDEO

Examiner

Thomas L Dickey

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11-13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 10 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05 September 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2826

DETAILED ACTION

Election/Restriction

1. Applicant's election of Group I, claims 1-5 in the Paper filed 19 August 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Oath/Declaration

2. The oath/declaration filed on 05 September 2003 is acceptable.

Drawings

3. The formal drawings filed on 05 September 2003 are acceptable.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. The Information Disclosure Statement filed on 05 September 2003 has been considered.

Art Unit: 2826

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by CHIU ET AL. (2001/0010449).

Chiu et al. discloses a semiconductor device comprising a semiconductor element 300; a support member 330 having a recess (the recess is seen, filled with resin 320) for housing the semiconductor element 300, the support member 330 including lead electrodes 314 (in figure 3 through a draftsman's oversight only one lead electrode – the one operatively connected to contact electrode 308B of the semiconductor element 300 - is marked. However the other lead electrode is clearly seen, operatively connected to contact electrode 308A of the semiconductor element 300), operatively connected by a conductive member 312 to the semiconductor element 300, wherein the support member 330 has at least a first surface disposed adjacent to the recess and a second surface disposed adjacent to and offset from the first surface of the support member 330; and a sub-mount substrate 310 disposed in the recess and the semiconductor element 300 being disposed on the sub-mount substrate 310. Note figure 3 and paragraphs 0021-0026 of Chiu et al.

Art Unit: 2826

B. Claims 1-3,6-8, and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by OSHIO ET AL. (6,274,890).

Oshio et al. discloses a semiconductor device comprising a semiconductor element 1'; a support member 10 having a recess for housing the semiconductor element 1', the support member 10 including lead electrodes 21 and 22 and a support part holding the lead electrodes 21 and 22 so that a surface of each of the lead electrodes 21 and 22 is exposed in a bottom of the recess; wherein the support member 10 has at least a first surface having a protrusion 8 having a circular cross section disposed adjacent to a further recess 5 (the left hand element 5 seen in figures 15 and 16) having a circular cross section disposed thereon, (the said circular cross sections being visible in plan view of figure 16), further comprising a second surface disposed adjacent to and offset from the first surface of the support member 10 and having a depression 5 (the right hand element 5 seen in figures 15 and 16) for a second surface further recess and a second surface protrusion 10A forming an outer wall of the depression disposed thereon, wherein the second surface is angularly offset (note column 12 lines 59-60) from the first surface, and the further recess of the first surface is angularly extending between opposed surfaces of the semiconductor device, and the protrusion of the first surface is disposed on an end. With regard to claims 6-8, the semiconductor device further comprises a translucent member 9 for allowing light to exit from the semiconductor device, or for allowing light to be received by the semiconductor device, the translucent member 9 hav-

Art Unit: 2826

ing a light entrance portion and a light emitting portion. Note figures 15 and 16 and column 12 lines 49-65 and column 13 lines 1-32 of Oshio et al.

Allowable Subject Matter

7. Claims 4 and 5 are allowed over the references of record because none of these references disclosed or can be combined to yield the claimed invention such as a semiconductor device having a support, a recess, lead electrodes, first and second surfaces, and a semiconductor element comprising a semiconductor having at least an N-type contact layer and a P-side contact layer, wherein the N-type contact layer has an N-side electrode, and the N-type contact layer and the P-side contact layer each have separately recited P-side electrodes, as recited in claim 4.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published appli-

Art Unit: 2826

cations may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TLD
09/04


Minhloan Tran
Primary Examiner
Art Unit 2826